The background is white with several large, colorful circles and dashed lines. In the top left, there is a large teal circle with a white center, and a smaller teal circle next to it. In the top right, there is a large lime green circle with a smaller green circle inside it, both with dashed outlines. In the bottom left, there is a large green circle with a white center, and a smaller yellow circle next to it. In the bottom right, there is a large yellow circle with a white center, and a smaller orange circle next to it. A dashed line curves from the top left, around the text, and towards the bottom right.

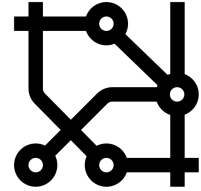
How Reliable are the Buses of Chester Square Park?

Breanna Madison, Andrew Carlson, & Mihir Patil



Our Mission:

- Determine the reliability of the MBTA Buses
 - Route 1
 - Route 43
 - SL 4
 - SL 5
- Reliability = difference between the **scheduled** and **predicted** times for bus arrival



Domain Situation

Examine the reliability of the buses
affecting Chester Square Park

Data/Task Abstraction

Freq/Minute Delays
Map of Stops

Visual Encoding/Interaction Idiom

Position
Color

Algorithm

Fast



Our Data:

MBTA V3 API

- Stops
- Schedules
- Predictions
- Trips



Fields:

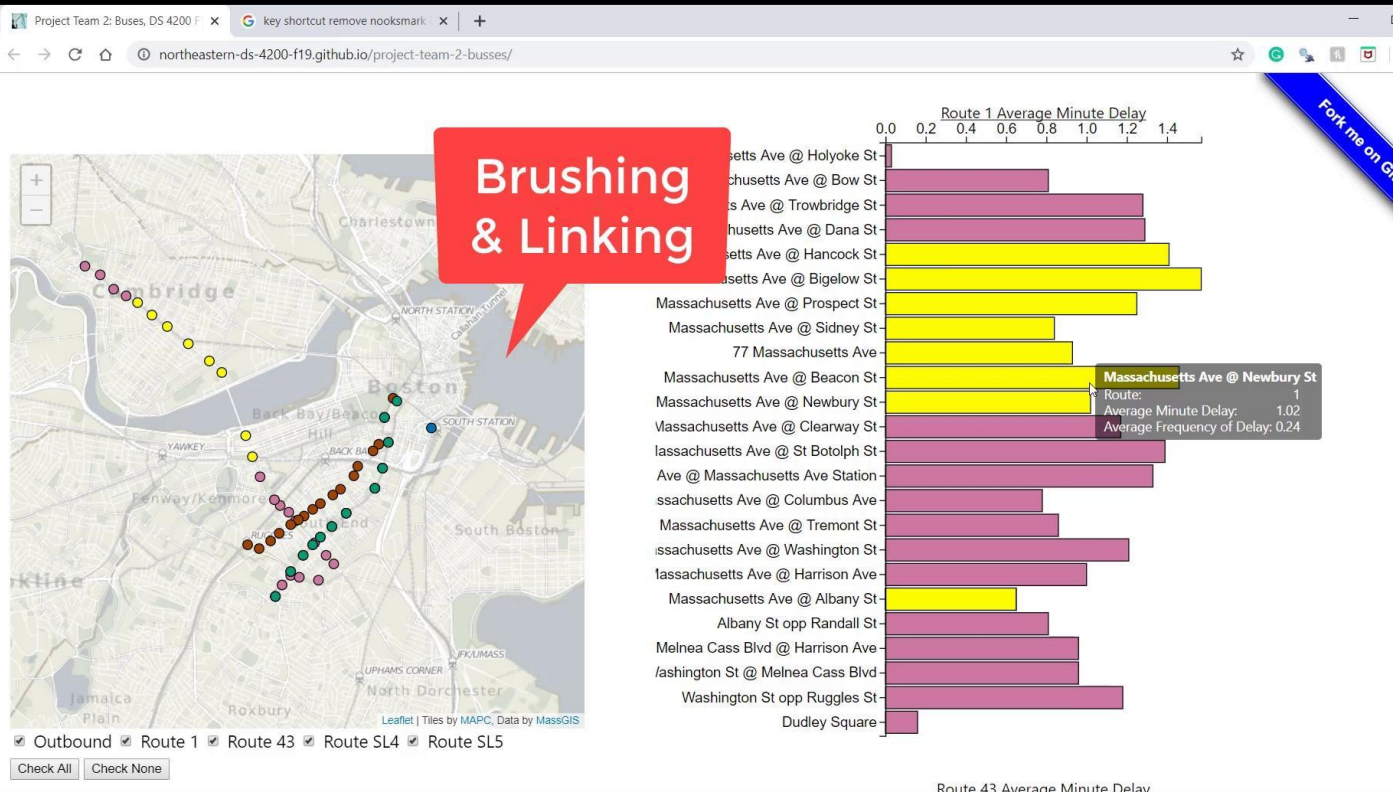
- ID
- Time (if applicable)
- Direction
(inbound/outbound)

The background features a light gray dashed circle. Various colored circles and arcs are scattered around it: a large lime green circle at the top left, a teal arc at the top center, a blue circle with white quotation marks below the teal arc, a yellow circle at the top right, a large orange circle at the bottom left, a yellow arc at the bottom left, a pink circle at the bottom left, a yellow circle at the bottom right, a teal circle at the bottom right, and a small pink circle at the top right.

“

Time for a Live
Demo!

Brushing & Linking



Conclusions:

- **33%** of trips experienced delays
- **Several** stops were consistently behind schedule
- Justification for **change**



Boston BRT



<http://www.bostonbrt.org/>

Challenges

Task Analysis

- Deciding on a final project
- Generate value for the Chester Square Park



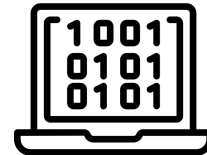
Leaflet Map

- Creating points on the map
- Coding our SVG layer over the map



V3 API

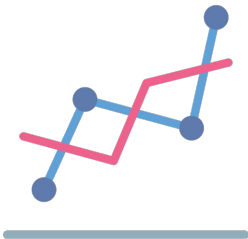
- Confusing data
- Larger than expected learning curve



Possible Future Improvements

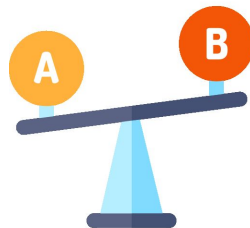
Parallel Coordinates

- Phased out due to bugs and misalignment with our final task
- Could provide interesting visual patterns for riders.



Comparison to Boston BRT

- Difficult since there is not data pertaining to the Boston BRT trials.
- Could simulate the BRT based on its claims to create a data set for comparison



The background is white with several colorful geometric shapes. In the top-left, there is a large teal circle with a white center, a smaller solid teal circle, and a dashed teal circle. In the top-right, there is a large lime green circle, a smaller solid lime green circle, and a dashed lime green circle. In the bottom-left, there is a large green circle with a white center, a smaller solid green circle, and a dashed green circle. In the bottom-right, there is a large yellow circle, a smaller solid yellow circle, and a dashed yellow circle. A large, faint dashed line curves from the top-left towards the bottom-right, passing behind the text.

Thank you!

Questions?